

AMENDMENTS TO THE SPECIFICATION:

Please add the following paragraphs prior to page 1, line 3 as follows:

BACKGROUND

1. Technical Area

Please add the following paragraph prior to page 1, line 6 as follows:

2. Related Art

Please add the following paragraph prior to page 2, line 1 as follows:

BRIEF SUMMARY

Please amend the paragraph beginning at page 2, line 21 through page 3, line 4, as follows:

This preferred feature of the invention facilitates the use of hybrid networks where only some data terminals may be connected to, e.g., ATM switches that support switched virtual circuits, while other data terminals may be connected only to, e.g., IP routers. Data is communicated to the customer to indicate when the use of a switched virtual circuit is possible. This data may be provided by a domain name server located in the network, or may be provided by the data server itself, for example in an HTML page indicating an ATM address and a bandwidth capability for the data server. In a preferred implementation, the data is in the form of a URL (Uniform Resource Locator) that is specific to resources accessible via a circuit connected network, and the URL contains all the information necessary to set up the switched virtual circuit. The URL may be in the form:

<circuit-connected identifier part>://<service parameter part>*<address part>

where * is a predetermined separator character. The use of URL's in this manner is described and claimed in our copending application, also entitled "Communications Network", filed 9 December 1998, (USSN 09/831,274 filed May 9, 2001 Case Reference A25679).

Please add the following paragraph prior to page 3, line 7 as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following paragraph prior to page 3, line 17 as follows:

Please amend the paragraph beginning at page 3, line 17, as follows:

As shown in Figure 1, a customer terminal 1, in this example a personal computer, is connected to other data terminals 2,3 via a network 4. In this example, the data terminals 1,2 3,4 are web servers arranged to return HTTP (hypertext transport protocol) pages to the customer terminal 1. The network 4 includes a first subdomain 4a that is part of the public Internet and includes a number of Internet Protocol (IP) routers 5. Suitable routers are commercially available devices such as CISCO series 7500 routers. A second subdomain 4b comprises a number of ATM (asynchronous transfer mode) switches 6. Although, for ease of illustration, only two ATM switches are shown, in practice the subdomain 4b is likely to contain a larger number of switches. Suitable switches are commercially available devices such as ALCATEL 1100 HSS Series 700 switches. These switches support ATM Switched Virtual Circuits (SVCs), in accordance with the ATM Forum V3.1 and V4.0 SVC definitions.

Please amend the paragraph beginning at page 3, line 32, as follows:

One of the data terminals 2,3 3,4 has only an IP interface and is connected to one both of the subdomains 4a,4b. The other of the data terminals 3,4 has an IP over ATM interface and is connected via that interface to both of the subdomains.

Please amend the paragraph beginning at page 4, line 1, as follows:

In use, the customer terminal 1 initially retrieves web pages from the data terminals 2,3 3,4 via the IP network 4a of the first subdomain. The web pages are displayed by a web browser application running on the customer terminal in a conventional fashion. The data flow between the customer terminal 1 and the data terminals 2,3 3,4 via the IP network is shown by the dashed broad line in the Figure. The data flow is effected by best-effort routing by the IP routers 5, and accordingly the quality of service varies depending on the loading of the routers.

Please amend the paragraph beginning at page 4 line 8, as follows:

As already indicated, one of the data terminals 2,3 3,4 is also accessible via the ATM network of the second subdomain. When the user wishes to retrieve data, such as a video data, that requires a high and guaranteed quality of service, from the said data terminal, then the user initiates a switched virtual circuit (SVC) via the subdomain 4b to the data terminal. The subsequent data flow via this SVC is indicated by the solid broad line in Figure 1.

Please amend the paragraph beginning at page 4 line 14, as follows:

The operation of the network will now be described in further detail with reference to Figures 2 to 5. In these Figures, the customer terminal 1 is referenced “End User 1”, data terminal 3 is referenced “Content Provider 1” and data terminal 4 is referenced “Content Provider 2”. Other customer terminals, referenced “End User 2” and “End User 3” are also shown. Also, in these examples, the connection from End User 1 to the IP subdomain 4a is via an Internet Service Provider (ISP).

Please amend the paragraph beginning at page 4, line 21 through page 5, line 8, as follows:

End user 1 is connected to the ISP via the ATM network subdomain 4b. The connection to the ISP gives End User 1 access to the Internet and to other data terminals having Internet connections. Some of these other data terminals are also connected to the ATM network subdomain 4b. In Figure 2, Content Provider 2 and End User 3 are connected to the ATM network 4b and can potentially be reached via an SVC cut-through, whereas Content Provider 1 and End User 2 have only have connections to the Internet. End User 1 need to know which customers can be reached via an SVC cut-through. Examples of mechanisms by which the customer can know if it is possible to establish an SVC cut-through are:

A) If a DNS (domain name server) translation of the chosen customer's URL to an ATM address exists. For example, End User 1 could request a DNS translation for Content Provider 2, by communicating a URL "http://www.CP2.co.uk" to the DNS. As Content Provider 2 has direct access to an ATM network, the Content Provider 2 URL would map to an ATM address. Both the IP address of Content Provider 2 and also the corresponding ATM address are returned to the End User 1. The fact that an ATM address has been returned indicates to End User 1 that an SVC cut-through is possible. Similarly, End User 1 may request a DNS translation for Content Provider 1. As Content Provider 1 does not have direct ATM network access the Content Provider 1 URL would not map to an ATM address, and this indicates to End User 1 that no SVC is possible in this

Please amend the paragraph beginning at page 5, line 21, as follows:

When the customer chooses to initiate an SVC cut-through, for example in order to access VoD (Video-on-Demand) material on Content Provider 2, signalling is used between the customers across the ATM network to set-up the SVC. This phase is illustrated in Figure 3. Standard ATM-F and ITU-T signalling protocols are used in setting up the SVC. As shown, in the Figure, the connection from End User 1 to the ISP remains active, so that, once the SVC is released, there still exists a connection into the IP network subdomain 4a.

Please amend the paragraph beginning at page 7, line 1, as follows:

4. If the web browser client determines after decoding the ATM URL that no ATM parameter value(s) need to be specified manually by the Web browser, then the ATM GUI is not launched and the Web browser uses the underlying WinSock2 Application Programming Interface (API) functionality to establish an ATM SVC to the desired destination. The characteristics of this ATM SVC will be the same as those values returned from the HTTP server in the ATM URL. This corresponds to state ATM_GET_SETTINGS in Figure 1 4.